

## What is a National Estuarine Research Reserve (NERR) site?



 network of 29 coastal sites designated to protect and study estuarine systems

(with Connecticut and Wisconsin NERR sites in development)

### **Programs Common to all NERR sites**

- **Stewardship**. Each reserve undertakes the tasks needed to keep the site protected and functional.
- **Monitoring**. Short- and long-term monitoring data (water quality, weather, biological systems, habitat, etc.) document impacts from changing weather and surroundings.
- **Research**. The Science Collaborative, a funding program that brings the end user into the research process, develops research with local and national relevance and applicability.
- **Training**. Training professionals bring relevant monitoring and research results, and information about how to use this information, to community leaders.
- **Education**. Each reserve is a living classroom that advances estuary literacy and generates meaningful educational experiences for adults, children, and teachers. Thousands participate each year.

# What is a National Estuarine Research Reserve (NERR) site?

### 921.11 Site selection and feasibility.

- (c) As part of the site selection process, the state and NOAA shall evaluate and select the final site(s). NOAA has final authority in approving such sites. Site selection shall be guided by the following principles:
- (1) The site's contribution to the biogeographical and typological balance of the National Estuarine Research Reserve System.
- (2) The site's ecological characteristics, including its biological productivity, diversity of flora and fauna, and capacity to attract a broad range of research and educational interests.
- (3) Assurance that the site's boundaries encompass an adequate portion of the key land and water areas of the natural system to approximate an ecological unit and to ensure effective conservation
- (4) The site's suitability for long-term estuarine research
- (5) The site's compatibility with existing and potential land and water uses in contiguous areas as well as approved coastal and estuarine management plans
- (6) The site's importance to education and interpretive efforts

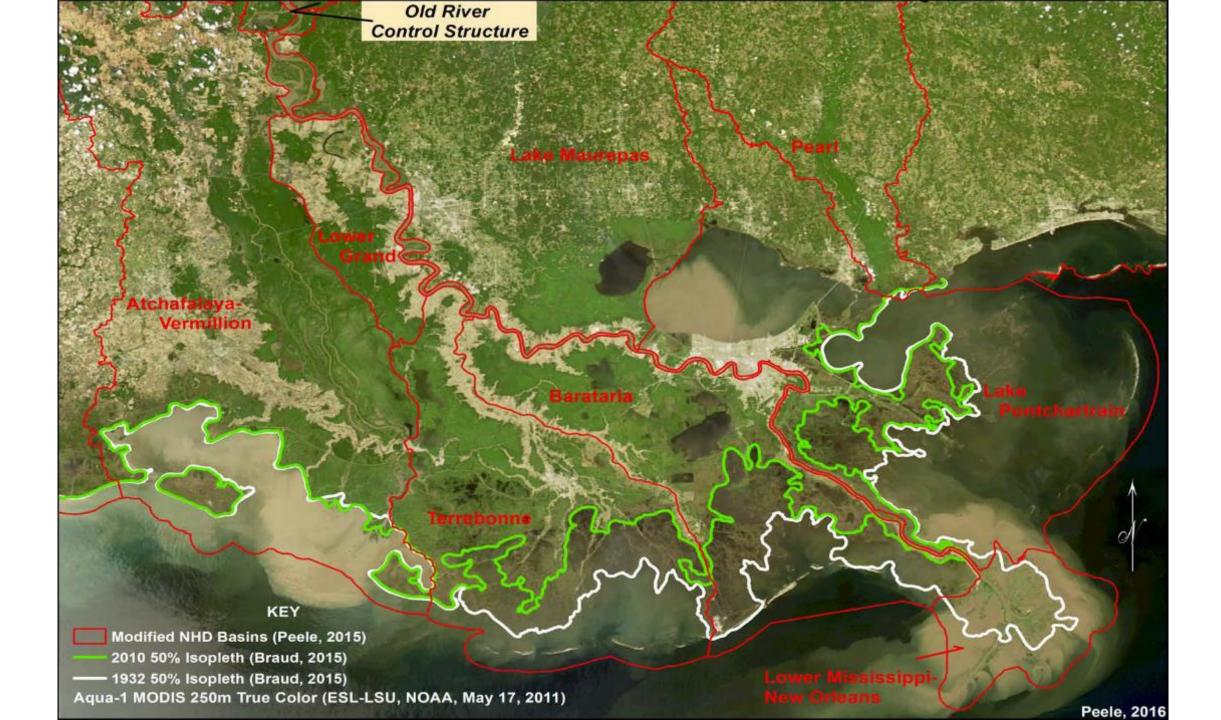
(1) The site's contribution to the biogeographical and typological balance of the National Estuarine Research Reserve System. NOAA will give priority consideration to proposals to establish Reserves in biogeographic regions or subregions or incorporating types that are not represented in the system.

"Louisiana would like to nominate a site in the **Delta biogeographic region** for inclusion in the NERRS"
-Governor John Bel Edwards

# How do we best design a Delta NERR site?

### A Delta NERR should include:

- River and its alluvial floodplain
- River Delta
- Estuarine ecosystem



## **Atchafalaya Basin NERR Candidate Site Proposal**

#### **Team Members:**

Brian Roberts (LUMCON), Team Lead
Jimmy Nelson (ULL), Team Co-Lead
Justin Lemoine (Atchafalaya National Heritage Area), Team Co-Lead

Craig Colten (LSU)

Brian Gautreau (LSU Ag Center Youth Wetlands and Outreach Program)

Dani Dilullo (Louisiana Sea Grant Communications Coordinator)

Murt Conover (LUMCON Education and Outreach)

Erik Johnson (Audubon Louisiana)

Bryan Piazza (The Nature Conservancy)

Joseph Baustian (The Nature Conservancy)

Ken Krauss (USGS)

Simone Maloz (Restore or Retreat, Inc)

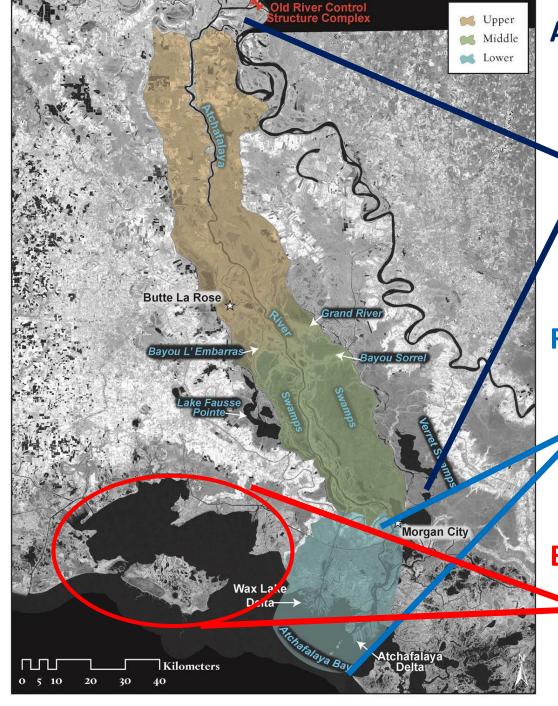
Victoria Sagrera (Restore or Retreat, Inc)

## Atchafalaya Basin NERR Proposal Development Plan

Overall vision for and approach to the development of the Atchafalaya NERR:

Include all of the key habitats/ecosystems looked at in the NERR selection process with the idea being that the Atchafalaya basin provides a unique river delta NERR that encompasses all key relevant habitats found in Louisiana.

The Atchafalaya Basin is essentially a microcosm of Louisiana representing all of the habitats found within the state and is a model for how the state and other deltaic systems are formed.



### **Alluvial Floodplain Zone**

- Upper: Bottomland hardwood forests
  - High sites with low flooding: American sweetgum, water oak, sugarberry
  - Low sites with high flooding: overcup oak, water hickory, green ash
- Lower: Cypress-Tupelo swamps
  - scrub-shrub community in some areas (water elm, swamp privet, buttonbush, scattered cypress)

#### **River Delta and Fresh Marsh Zone**

- Upstream tips of islands:
  - Black willow with understory of elephant ear, rice cutgrass, climbing hempweed, etc.
- As elevation decreases, tidal fresh marsh vegetation dominates

### **Brackish and Salt Marsh Zone**

 As move east and west away from river deltas, estuaries fringed with brackish and salt marshes and to a lesser extent black mangrove patches

## Proposed Atchafalaya NERR site would only require state lands

### **Alluvial Floodplain Zone**

- Indian Bayou WMA
- Attakapas Island WMA
- state river bottom between

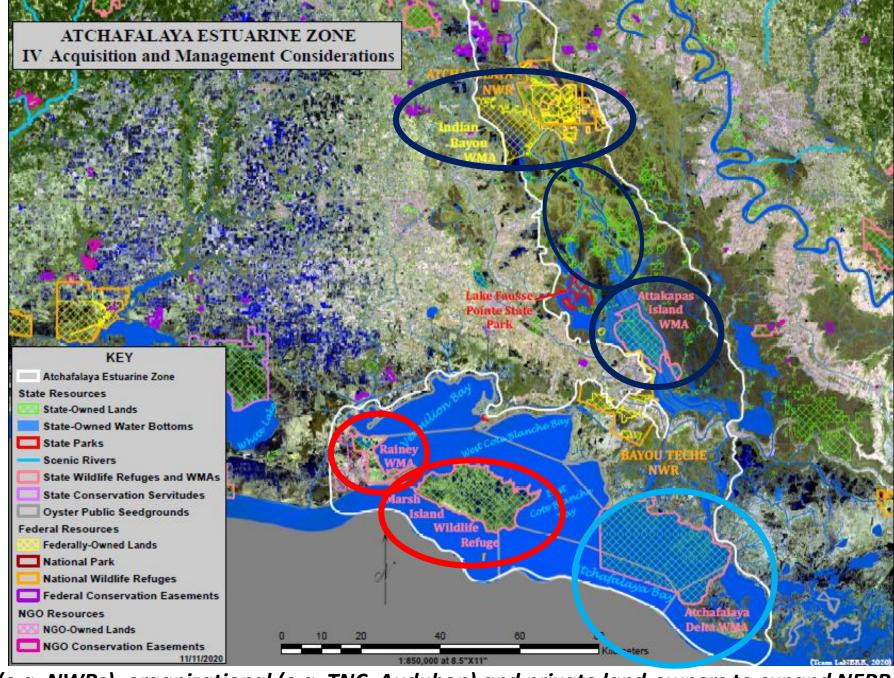
#### River Delta / Fresh Marsh Zone

Atchafalaya Delta WMA

#### **Brackish / Salt Marsh Zone**

- Marsh Island Wildlife Refuge
- LA State WMA (labeled Rainey on maps)

Proposed Site also includes state estuarine/offshore water bottoms



Long term goal: work with federal (e.g. NWRs), organizational (e.g. TNC, Audubon) and private land-owners to expand NERR

## **NERR Site Selection Criteria Categories:**

- I. Environmental Representativeness
- II. Value of the Site for Research, Monitoring, and Resource Protection
- III. Suitability of the Site for Education and Interpretation
- IV. Acquisition and Management Considerations
- V. Ability to Accommodate Climate Change
- VI.LA NERR Partnerships

## **NERR Site Selection Timeline:**

- May 13<sup>th</sup>: Phase I Site Proposals
- July 14<sup>th</sup>: Phase II Site Proposals
- September: Town Hall Meetings (all will be virtual due to COVID)
  - Wednesday September 8<sup>th</sup>, 6 8 pm
  - Tuesday September 14<sup>th</sup>, 12-2 pm
  - Thursday September 16<sup>th</sup>, 6 8 pm
- Late October: Phase III (Final) Draft Site Proposals submitted
- Late December: Final versions of Phase III Proposals submitted
- January 2022: Nomination selection sent to Governor